

## WEST Search History

DATE: Monday, June 21, 2004

Hide?	Set Name	Query	Hit Count
	<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=OR</i>		
<input type="checkbox"/>	L12	L9 and lecithin	44
<input type="checkbox"/>	L11	L9 and lecithin	44
<input type="checkbox"/>	L10	L9 and phosphocholine	0
<input type="checkbox"/>	L9	l1 and syphilis	108
<input type="checkbox"/>	L8	L7 and cholestrol	1
<input type="checkbox"/>	L7	L6 and lecithin	62
<input type="checkbox"/>	L6	L3 and antigen	111
<input type="checkbox"/>	L5	L3 and syphilis	0
<input type="checkbox"/>	L4	L3 and VDRL	0
<input type="checkbox"/>	L3	L2 and synthetic	146
<input type="checkbox"/>	L2	L1 and phosphocholine	164
<input type="checkbox"/>	L1	tetramyristoyl cardiolipin	1625

END OF SEARCH HISTORY

=> d hist

(FILE 'HOME' ENTERED AT 19:03:34 ON 21 JUN 2004)

FILE 'BIOSIS, MEDLINE, EMBASE, JAPIO, USPATFULL, AGRICOLA, SCISEARCH, WPIDS, HCAPLUS' ENTERED AT 19:04:08 ON 21 JUN 2004

L1	26 S TETRAMYRISTOYL CARDIOLIPIN
L2	0 S L1 AND HOSPHOCHOLINE
L3	5 S L1 AND PHOSPHOCHOLINE
L4	1 DUP REM L3 (4 DUPLICATES REMOVED)
	E POPE
L5	32 S E3 AND VICTORIA
L6	1 S L5 AND PHOSPHOCHOLINE
L7	1 S L5 AND CARDIOLIPIN
L8	1 S L6 AND L7
L9	2363 S VDRL
L10	522 S L9 AND ANTIGEN
L11	23 S L10 AND CARDIOLIPIN (L) SYNTHETIC
L12	19 DUP REM L11 (4 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 19:11:43 ON 21 JUN 2004

FILE 'HCAPLUS' ENTERED AT 19:04:08 ON 21 JUN 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> s tetramyristoyl cardiolipin  
L1 26 TETRAMYRISTOYL CARDIOLIPIN

=> s l1 and hosphocholine  
L2 0 L1 AND HOSPHOCHOLINE

=> s l1 and phosphocholine  
L3 5 L1 AND PHOSPHOCHOLINE

=> d l3 1-5 ibib abs

L3 ANSWER 1 OF 5 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 2000:334114 BIOSIS  
DOCUMENT NUMBER: PREV200000334114  
TITLE: Use of synthetic cardiolipin and lecithin in the antigen  
used by the Venereal Disease Research Laboratory test for  
serodiagnosis of syphilis.  
AUTHOR(S): Castro, Arnold R. [Reprint author]; Morrill, William E.;  
Shaw, Walter A.; Gale, David C.; Park, Mahin M.;  
Peregrino-Ferreira, Luiz A.; Bazzo, Maria L.; Pope,  
Victoria  
CORPORATE SOURCE: Division of AIDS, STD, and TB Laboratory Research, Centers  
for Disease Control and Prevention, 1600 Clifton Rd.,  
Atlanta, GA, 30333, USA  
SOURCE: Clinical and Diagnostic Laboratory Immunology, (July, 2000)  
Vol. 7, No. 4, pp. 658-661. print.  
ISSN: 1071-412X.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 10 Aug 2000  
Last Updated on STN: 7 Jan 2002

AB The Venereal Disease Research Laboratory (VDRL) test is a  
microflocculation test for syphilis that uses an antigen containing  
cardiolipin, lecithin, and cholesterol. For more than 50 years, the  
preparation of natural cardiolipin and lecithin for this test has been  
based on the Pangborn method which involves isolating and purifying these  
components from beef hearts. This process is tedious and time-consuming  
and results in a variable purity range. In our studies, we found that a  
VDRL antigen using synthetic **tetramyristoyl cardiolipin**  
and synthetic 1-palmitoyl-2-oleoyl-sn-glycero-3-**phosphocholine**  
(lecithin) was as specific in detecting syphilis as a VDRL antigen made  
with natural components. In 85% of the cases, we obtained an endpoint  
titer of 1/2 or 1 dilution more than a titer obtained with a VDRL antigen  
made with natural components. The use of these pure synthetic compounds,  
with a purity of 99%, would offer advantages in the standardization and  
stability of the VDRL antigen. Because this antigen is the basic  
ingredient in the preparation of nontreponemal reagents such as the rapid  
plasma reagin, toluidine red unheated serum test, and the unheated serum  
reagin, the use of this synthetic VDRL antigen should also increase the  
reactivity of these reagents.

L3 ANSWER 2 OF 5 MEDLINE on STN  
ACCESSION NUMBER: 2000425594 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10882668  
TITLE: Use of synthetic cardiolipin and lecithin in the antigen  
used by the venereal disease research laboratory test for  
serodiagnosis of syphilis.  
AUTHOR: Castro A R; Morrill W E; Shaw W A; Gale D C; Park M M;  
Peregrino-Ferreira L A; Bazzo M L; Pope V

CORPORATE SOURCE: Division of AIDS, STD, and TB Laboratory Research, Centers  
for Disease Control and Prevention, Atlanta, Georgia 30333,  
USA.. ajc5@cdc.gov  
SOURCE: Clinical and diagnostic laboratory immunology, (2000 Jul) 7  
(4) 658-61.  
Journal code: 9421292. ISSN: 1071-412X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200009  
ENTRY DATE: Entered STN: 20000922  
Last Updated on STN: 20000922  
Entered Medline: 20000912

AB The Venereal Disease Research Laboratory (VDRL) test is a  
microflocculation test for syphilis that uses an antigen containing  
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(lecithin) was as specific in detecting syphilis as a VDRL antigen made  
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plasma reagin, toluidine red unheated serum test, and the unheated serum  
reagin, the use of this synthetic VDRL antigen should also increase the  
reactivity of these reagents.

L3 ANSWER 3 OF 5 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

ACCESSION NUMBER: 2000255565 EMBASE  
TITLE: Use of synthetic cardiolipin and lecithin in the antigen  
used by the Venereal Disease Research Laboratory test for  
serodiagnosis of syphilis.  
AUTHOR: Castro A.R.; Morrill W.E.; Shaw W.A.; Gale D.C.; Park M.M.;  
Peregrino- Ferreira L.A.; Bazzo M.L.; Pope V.  
CORPORATE SOURCE: A.R. Castro, Div. of AIDS, STD, and TB Lab. Res., Centers  
for Dis. Control and Prev., Mail Stop D-13, 1600 Clifton  
Rd., Atlanta, GA 30333, United States. ajc@cdc.gov  
SOURCE: Clinical and Diagnostic Laboratory Immunology, (2000) 7/4  
(658-661).  
Refs: 13  
ISSN: 1071-412X CODEN: CDIMEN  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 004 Microbiology  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB The Venereal Disease Research Laboratory (VDRL) test is a  
microflocculation test for syphilis that uses an antigen containing  
cardiolipin, lecithin, and cholesterol. For more than 50 years, the  
preparation of natural cardiolipin and lecithin for this test has been  
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VDRL antigen using synthetic **tetramyristoyl cardiolipin**  
and synthetic 1-palmitoyl- 2-oleoyl-sn-glycero-3-**phosphocholine**  
(lecithin) was as specific in detecting syphilis as a VDRL antigen made

with natural components. In 85% of the cases, we obtained an endpoint titer of 1/2 or 1 dilution more than a titer obtained with a VDRL antigen made with natural components. The use of these pure synthetic compounds, with a purity of 99%, would offer advantages in the standardization and stability of the VDRL antigen. Because this antigen is the basic ingredient in the preparation of nontreponemal reagents such as the rapid plasma reagin, toluidine red unheated serum test, and the unheated serum reagin, the use of this synthetic VDRL antigen should also increase the reactivity of these reagents.

L3 ANSWER 4 OF 5 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN

ACCESSION NUMBER: 2000:523021 SCISEARCH

THE GENUINE ARTICLE: 332AT

TITLE: Use of synthetic cardiolipin and lecithin in the antigen used by the Venereal Disease Research Laboratory Test for serodiagnosis of syphilis

AUTHOR: Castro A R (Reprint); Morrill W E; Shaw W A; Gale D C; Park M M; PeregrinoFerreira L A; Bazzo M L; Pope V

CORPORATE SOURCE: CTR DIS CONTROL & PREVENT, DIV AIDS STD, 1600 CLIFTON RD, MAIL STOP D-13, ATLANTA, GA 30333 (Reprint); CTR DIS CONTROL & PREVENT, TB LAB RES, ATLANTA, GA 30333; GEORGIA DEPT HUMAN RESOURCES LAB, ATLANTA, GA; AVANTI POLAR LIPIDS INC, ALABASTER, AL; UNIV FED SANTA CATARINA, FLORIANOPOLIS, SC, BRAZIL

COUNTRY OF AUTHOR: USA; BRAZIL

SOURCE: CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY, (JUL 2000) Vol. 7, No. 4, pp. 658-661.

Publisher: AMER SOC MICROBIOLOGY, 1752 N ST NW,

WASHINGTON, DC 20036-2904.

ISSN: 1071-412X.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LIFE

LANGUAGE: English

REFERENCE COUNT: 13

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB The Venereal Disease Research Laboratory (VDRL) test is a microflocculation test for syphilis that uses an antigen containing cardiolipin, lecithin, and cholesterol. For more than 50 years, the preparation of natural cardiolipin and lecithin for this test has been based on the Pangborn method which involves isolating and purifying these components from beef hearts. This process is tedious and time-consuming and results in a variable purity range. In our studies, we found that a VDRL antigen using synthetic **tetramyristoyl cardiolipin** and synthetic 1-palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine (lecithin) was as specific in detecting syphilis as a VDRL antigen made with natural components. In 85% of the cases, we obtained an endpoint titer of 1/2 or 1 dilution more than a titer obtained with a VDRL antigen made with natural components. The use of these pure synthetic compounds, with a purity of 99%, would offer advantages in the standardization and stability of the VDRL antigen. Because this antigen is the basic ingredient in the preparation of nontreponemal reagents such as the rapid plasma reagin, toluidine red unheated serum test, and the unheated serum reagin, the use of this synthetic VDRL antigen should also increase the reactivity of these reagents.

L3 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:537109 HCAPLUS

DOCUMENT NUMBER: 134:128134

TITLE: Use of synthetic cardiolipin and lecithin in the antigen used by the venereal disease research laboratory test for serodiagnosis of syphilis

AUTHOR(S): Castro, Arnold R.; Morrill, William E.; Shaw, Walter A.; Gale, David C.; Park, Mahin M.; Peregrino-Ferreira, Luiz A.; Bazzo, Maria L.; Pope,

CORPORATE SOURCE: Victoria  
 Division of AIDS, STD, and TB Laboratory Research,  
 Centers for Disease Control and Prevention, Atlanta,  
 GA, 30333, USA  
 SOURCE: Clinical and Diagnostic Laboratory Immunology (2000),  
 7(4), 658-661  
 CODEN: CDIMEN; ISSN: 1071-412X  
 PUBLISHER: American Society for Microbiology  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The Venereal Disease Research Laboratory (VDRL) test is a microflocculation  
 test

for syphilis that uses an antigen containing cardiolipin, lecithin, and  
 cholesterol. For more than 50 yr, the preparation of natural cardiolipin and  
 lecithin for this test has been based on the Pangborn method which  
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 as specific in detecting syphilis as a VDRL antigen made with natural  
 components. In 85% of the cases, we obtained an endpoint titer of 1/2 or  
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 components. The use of these pure synthetic compds., with a purity of  
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 of non-treponemal reagents such as the rapid plasma reagin, toluidine red  
 unheated serum test, and the unheated serum reagin, the use of this  
 synthetic VDRL antigen should also increase the reactivity of these  
 reagents.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> dup rem l3  
 PROCESSING COMPLETED FOR L3  
 L4 1 DUP REM L3 (4 DUPLICATES REMOVED)

=> d hist

(FILE 'HOME' ENTERED AT 19:03:34 ON 21 JUN 2004)

FILE 'BIOSIS, MEDLINE, EMBASE, JAPIO, USPATFULL, AGRICOLA, SCISEARCH,  
 WPIDS, HCAPLUS' ENTERED AT 19:04:08 ON 21 JUN 2004

L1 26 S TETRAMYRISTOYL CARDIOLIPIN  
 L2 0 S L1 AND HOSPHOCHOLINE  
 L3 5 S L1 AND PHOSPHOCHOLINE  
 L4 1 DUP REM L3 (4 DUPLICATES REMOVED)

=> e pope  
 E1 2 POPDYN/BI  
 E2 2 POPDYNJFB/BI  
 E3 3925 --> POPE/BI  
 E4 4 POPE0/BI  
 E5 2 POPE1/BI  
 E6 4 POPE101/BI  
 E7 1 POPE111/BI  
 E8 1 POPE2/BI  
 E9 4 POPE3/BI  
 E10 5 POPE40/BI  
 E11 11 POPE51/BI  
 E12 5 POPE52/BI

=> s e3 and victoria

L5 32 POPE/BI AND VICTORIA

=> s l5 and phosphocholine  
L6 1 L5 AND PHOSPHOCHOLINE

=> s l5 and cardiolipin  
L7 1 L5 AND CARDIOLIPIN

=> s l6 and l7  
L8 1 L6 AND L7

=> d l8 ibib abs

L8 ANSWER 1 OF 1 USPATFULL on STN

ACCESSION NUMBER: 2002:141139 USPATFULL

TITLE: Methods of enhancing SPLP-mediated transfection using  
endosomal membrane destabilizers

INVENTOR(S): Lam, Angela M.I., Vancouver, CANADA  
Palmer, Lorne R., Vancouver, CANADA  
Cullis, Pieter R., Vancouver, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002072121	A1	20020613
APPLICATION INFO.:	US 2001-839707	A1	20010420 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-553639, filed on 20 Apr 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	CA 2000-451	20000420
	US 2000-227949P	20000825 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	68	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	23 Drawing Page(s)	
LINE COUNT:	3598	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel and surprisingly effective methods  
for delivering nucleic acids to cells. These methods are based upon the  
discovery that the presence of endosomal membrane destabilizers (e.g.,  
calcium) leads to a dramatic increase in the transfection efficiency of  
plasmids formulated as SPLP, or "stabilized plasmid-lipid particles."

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s VDRL  
L9 2363 VDRL

=> s l9 and antigen  
L10 522 L9 AND ANTIGEN

=> s l10 and cardiolipin (l) synthetic  
L11 23 L10 AND CARDIOLIPIN (L) SYNTHETIC

=> dup rem l11  
PROCESSING COMPLETED FOR L11  
L12 19 DUP REM L11 (4 DUPLICATES REMOVED)

=> d l11 1-19 ibib abs

L11 ANSWER 1 OF 23 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
 ACCESSION NUMBER: 2000:334114 BIOSIS  
 DOCUMENT NUMBER: PREV200000334114  
 TITLE: Use of **synthetic cardiolipin** and  
 lecithin in the **antigen** used by the Venereal  
 Disease Research Laboratory test for serodiagnosis of  
 syphilis.  
 AUTHOR(S): Castro, Arnold R. [Reprint author]; Morrill, William E.;  
 Shaw, Walter A.; Gale, David C.; Park, Mahin M.;  
 Peregrino-Ferreira, Luiz A.; Bazzo, Maria L.; Pope,  
 Victoria  
 CORPORATE SOURCE: Division of AIDS, STD, and TB Laboratory Research, Centers  
 for Disease Control and Prevention, 1600 Clifton Rd.,  
 Atlanta, GA, 30333, USA  
 SOURCE: Clinical and Diagnostic Laboratory Immunology, (July, 2000)  
 Vol. 7, No. 4, pp. 658-661. print.  
 ISSN: 1071-412X.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 10 Aug 2000  
 Last Updated on STN: 7 Jan 2002  
 AB The Venereal Disease Research Laboratory (VDRL) test is a  
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**antigen** should also increase the reactivity of these reagents.

L11 ANSWER 2 OF 23 MEDLINE on STN  
 ACCESSION NUMBER: 2000425594 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 10882668  
 TITLE: Use of **synthetic cardiolipin** and  
 lecithin in the **antigen** used by the venereal  
 disease research laboratory test for serodiagnosis of  
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 AUTHOR: Castro A R; Morrill W E; Shaw W A; Gale D C; Park M M;  
 Peregrino-Ferreira L A; Bazzo M L; Pope V  
 CORPORATE SOURCE: Division of AIDS, STD, and TB Laboratory Research, Centers  
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 USA.. ajc5@cdc.gov  
 SOURCE: Clinical and diagnostic laboratory immunology, (2000 Jul) 7  
 (4) 658-61.  
 Journal code: 9421292. ISSN: 1071-412X.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200009



ENTRY DATE: Entered STN: 20000922  
Last Updated on STN: 20000922  
Entered Medline: 20000912

AB The Venereal Disease Research Laboratory (VDRL) test is a microflocculation test for syphilis that uses an **antigen** containing **cardiolipin**, lecithin, and cholesterol. For more than 50 years, the preparation of natural **cardiolipin** and lecithin for this test has been based on the Pangborn method which involves isolating and purifying these components from beef hearts. This process is tedious and time-consuming and results in a variable purity range. In our studies, we found that a **VDRL antigen** using **synthetic** tetramyristoyl **cardiolipin** and **synthetic** 1-palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine (lecithin) was as specific in detecting syphilis as a **VDRL antigen** made with natural components. In 85% of the cases, we obtained an endpoint titer of 1/2 or 1 dilution more than a titer obtained with a **VDRL antigen** made with natural components. The use of these pure **synthetic** compounds, with a purity of 99%, would offer advantages in the standardization and stability of the **VDRL antigen**. Because this **antigen** is the basic ingredient in the preparation of nontreponemal reagents such as the rapid plasma reagin, toluidine red unheated serum test, and the unheated serum reagin, the use of this **synthetic VDRL antigen** should also increase the reactivity of these reagents.

L11 ANSWER 3 OF 23 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

ACCESSION NUMBER: 2000255565 EMBASE  
TITLE: Use of **synthetic cardiolipin** and lecithin in the **antigen** used by the Venereal Disease Research Laboratory test for serodiagnosis of syphilis.  
AUTHOR: Castro A.R.; Morrill W.E.; Shaw W.A.; Gale D.C.; Park M.M.; Peregrino- Ferreira L.A.; Bazzo M.L.; Pope V.  
CORPORATE SOURCE: A.R. Castro, Div. of AIDS, STD, and TB Lab. Res., Centers for Dis. Control and Prev., Mail Stop D-13, 1600 Clifton Rd., Atlanta, GA 30333, United States. ajc@cdc.gov  
SOURCE: Clinical and Diagnostic Laboratory Immunology, (2000) 7/4 (658-661).  
Refs: 13  
ISSN: 1071-412X CODEN: CDIMEN  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 004 Microbiology  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB The Venereal Disease Research Laboratory (VDRL) test is a microflocculation test for syphilis that uses an **antigen** containing **cardiolipin**, lecithin, and cholesterol. For more than 50 years, the preparation of natural **cardiolipin** and lecithin for this test has been based on the Pangborn method which involves isolating and purifying these components from beef hearts. This process is tedious and time-consuming and results in a variable purity range. In our studies, we found that a **VDRL antigen** using **synthetic** tetramyristoyl **cardiolipin** and **synthetic** 1-palmitoyl- 2-oleoyl-sn-glycero-3-phosphocholine (lecithin) was as specific in detecting syphilis as a **VDRL antigen** made with natural components. In 85% of the cases, we obtained an endpoint titer of 1/2 or 1 dilution more than a titer obtained with a **VDRL antigen** made with natural components. The use of these pure **synthetic** compounds, with a purity of 99%, would offer advantages in the standardization and stability of the **VDRL antigen**. Because this **antigen** is the basic ingredient in the preparation of nontreponemal reagents such as the

rapid plasma reagin, toluidine red unheated serum test, and the unheated serum reagin, the use of this **synthetic VDRL antigen** should also increase the reactivity of these reagents.

L11 ANSWER 4 OF 23 USPATFULL on STN

ACCESSION NUMBER: 2004:13382 USPATFULL

TITLE: APL immunoreactive peptides, conjugates thereof and methods of treatment for aPL antibody-mediated pathologies

INVENTOR(S): Victoria, Edward Jess, San Diego, CA, UNITED STATES  
Marquis, David Matthew, Encinitas, CA, UNITED STATES  
Jones, David S., San Diego, CA, UNITED STATES  
Yu, Lin, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004009904	A1	20040115
APPLICATION INFO.:	US 2002-44844	A1	20020110 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-160513, filed on 24 Sep 1998, GRANTED, Pat. No. US 6410775 Continuation of Ser. No. US 1996-760508, filed on 5 Dec 1996, ABANDONED Continuation-in-part of Ser. No. US 1996-660092, filed on 6 Jun 1996, GRANTED, Pat. No. US 6207160 Continuation-in-part of Ser. No. US 1995-482651, filed on 7 Jun 1995, GRANTED, Pat. No. US 5874409		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Madeline I. Johnston, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018		
NUMBER OF CLAIMS:	74		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	32 Drawing Page(s)		
LINE COUNT:	3595		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

AB APL analogs that (a) bind specifically to B cells to which an aPL epitope binds and are disclosed. Optimized analogs lack T cell epitope(s) are useful as conjugates for treating aPL antibody-mediated diseases. Conjugates comprising aPL analogs and nonimmunogenic valency platform molecules are provides as are novel nonimmunogenic valency platform molecules and linkers. Methods of preparing and identifying said analogs, methods of treatment using said analogs, methods and compositions for preparing conjugates of said analogs and diagnostic immunoassays for aPL antibodies are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 23 USPATFULL on STN

ACCESSION NUMBER: 2002:152823 USPATFULL

TITLE: APL immunoreactive peptides, conjugates thereof and methods of treatment for APL antibody-mediated pathologies

INVENTOR(S): Victoria, Edward Jess, San Diego, CA, United States  
Marquis, David Matthew, Encinitas, CA, United States  
Jones, David S., San Diego, CA, United States  
Yu, Lin, San Diego, CA, United States

PATENT ASSIGNEE(S): La Jolla Pharmaceutical Company, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6410775	B1	20020625
APPLICATION INFO.:	US 1998-160513		19980924 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-760508, filed on 5 Dec 1996, now abandoned Continuation-in-part of Ser. No. US		

1996-660092, filed on 6 Jun 1996, now patented, Pat.  
No. US 6207160 Continuation-in-part of Ser. No. US  
1995-482651, filed on 7 Jun 1995, now patented, Pat.  
No. US 5874409

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Ceperley, Mary E.  
LEGAL REPRESENTATIVE: Morrison & Foerster LLP  
NUMBER OF CLAIMS: 5  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 34 Drawing Figure(s); 32 Drawing Page(s)  
LINE COUNT: 4309

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB aPL analogs that (a) bind specifically to B cells to which an aPL epitope binds and are disclosed. Optimized analogs lack T cell epitope(s) are useful as conjugates for treating aPL antibody-mediated diseases. Conjugates comprising aPL analogs and nonimmunogenic valency platform molecules are provided as are novel nonimmunogenic valency platform molecules and linkers. Methods of preparing and identifying said analogs, methods of treatment using said analogs, methods and compositions for preparing conjugates of said analogs and diagnostic immunoassays for aPL antibodies are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 6 OF 23 USPATFULL on STN

ACCESSION NUMBER: 2001:112060 USPATFULL  
TITLE: Lipid-dependent diagnostic assays  
INVENTOR(S): Janoff, Andrew S., Yardley, PA, United States  
Rauch, Joyce, Montreal, Canada  
Taraschi, Theodore F., Tabernacle, NJ, United States  
PATENT ASSIGNEE(S): The Liposome Company, Inc., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6261792	B1	20010717
APPLICATION INFO.:	US 1995-441567		19950515 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1994-201718, filed on 25 Feb 1994, now abandoned Continuation of Ser. No. US 1991-723497, filed on 28 Jun 1991, now abandoned Continuation-in-part of Ser. No. US 1990-623340, filed on 7 Dec 1990, now abandoned		

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Gitomer, Ralph  
LEGAL REPRESENTATIVE: Goodman, Rosanne  
NUMBER OF CLAIMS: 28  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 2 Drawing Page(s)  
LINE COUNT: 959

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB For use in a lipid-dependent diagnostic assay, a stable aqueous suspension of a phospholipid which normally has a hexagonal (H.sub.II) organization when dispersed in an aqueous medium without detergent, the suspension containing the phospholipid, a detergent, and an aqueous phase. In the stable suspension, the phospholipid remains in suspension at a temperature of 25° C. for at least one hour. The suspension is suitable for providing the phospholipid to an assay for lupus anticoagulants which includes the step of pre-incubating a test sample with the phospholipid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.



L11 ANSWER 7 OF 23 USPATFULL on STN

ACCESSION NUMBER: 2001:43718 USPATFULL  
TITLE: aPL immunoreactive peptides, conjugates thereof and  
methods of treatment for aPL antibody-mediated  
pathologies  
INVENTOR(S): Victoria, Edward Jess, San Diego, CA, United States  
Marquis, David Matthew, Encinitas, CA, United States  
Jones, David S., San Diego, CA, United States  
Yu, Lin, San Diego, CA, United States  
PATENT ASSIGNEE(S): La Jolla Pharmaceutical Company, San Diego, CA, United  
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6207160	B1	20010327
APPLICATION INFO.:	US 1996-660092		19960606 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-482651, filed on 7 Jun 1995, now patented, Pat. No. US 5874409		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wortman, Donna C.		
LEGAL REPRESENTATIVE:	Morrison & Foerster, LLP		
NUMBER OF CLAIMS:	25		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	22 Drawing Figure(s); 20 Drawing Page(s)		
LINE COUNT:	2783		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB aPL analogs that (a) bind specifically to B cells to which an aPL  
epitope binds and are disclosed. Optimized analogs lack T cell  
epitope(s) are useful as conjugates for treating aPL antibody-mediated  
diseases. Methods of preparing and identifying said analogs, methods of  
treatment using said analogs, methods and compositions for preparing  
conjugates of said analogs and diagnostic immunoassays for aPL  
antibodies are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 8 OF 23 USPATFULL on STN

ACCESSION NUMBER: 1999:24628 USPATFULL  
TITLE: APL immunoreactive peptides, conjugates thereof and  
methods of treatment for APL antibody-mediated  
pathologies  
INVENTOR(S): Victoria, Edward Jess, San Diego, CA, United States  
Marquis, David Matthew, Encinitas, CA, United States  
PATENT ASSIGNEE(S): La Jolla Pharmaceutical Company, San Diego, CA, United  
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5874409		19990223
APPLICATION INFO.:	US 1995-482651		19950607 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Eisenschenk, Frank C.		
ASSISTANT EXAMINER:	Nolan, Patrick J.		
LEGAL REPRESENTATIVE:	Morrison & Foerster		
NUMBER OF CLAIMS:	2		
EXEMPLARY CLAIM:	2		
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 10 Drawing Page(s)		
LINE COUNT:	2083		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB aPL analogs that (a) bind specifically to B cells to which the aPL  
epitope binds and (b) lack T cell epitope(s), methods preparing and  
identifying said analogs and methods of treatment using said analogs are



disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 9 OF 23 USPATFULL on STN

ACCESSION NUMBER: 97:106984 USPATFULL  
TITLE: Stabilized microspheres and methods of preparation  
INVENTOR(S): Malick, Adrien, Granite, MD, United States  
Feindt, Hans H., Parkton, MD, United States  
Hahn, Gerald D., Severn, MD, United States  
PATENT ASSIGNEE(S): Becton, Dickinson and Company, Franklin Lakes, NJ,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5688697		19971118
APPLICATION INFO.:	US 1996-642373		19960503 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-343305, filed on 22 Nov 1994, now patented, Pat. No. US 5580735 which is a division of Ser. No. US 1993-1907, filed on 4 Jan 1993, now patented, Pat. No. US 5393527		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Green, Lora M.		
LEGAL REPRESENTATIVE:	Fugit, Donna R.		
NUMBER OF CLAIMS:	15		
EXEMPLARY CLAIM:	1		
LINE COUNT:	744		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Stabilized microspherical particles having hydrophobic liquid cores prepared as oil-in-water microemulsions. The particles are stabilized by a surface layer comprising an amphiphilic compound and may be functionalized to allow covalent coupling of a ligand to the surface of the particle. When used as tracers in assays, a water insoluble dye may be incorporated in the core liquid of the microparticles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 10 OF 23 USPATFULL on STN

ACCESSION NUMBER: 97:47266 USPATFULL  
TITLE: Stabilized microspheres and methods of preparation  
INVENTOR(S): Malick, Adrien, Granite, MD, United States  
Feindt, Hans H., Parkton, MD, United States  
PATENT ASSIGNEE(S): Becton, Dickinson and Company, Franklin Lakes, NJ,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5635357		19970603
APPLICATION INFO.:	US 1994-343313		19941122 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-1907, filed on 4 Jan 1993, now patented, Pat. No. US 5393527		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Cunningham, Thomas M.		
LEGAL REPRESENTATIVE:	Fugit, Donna R.		
NUMBER OF CLAIMS:	7		
EXEMPLARY CLAIM:	1		
LINE COUNT:	704		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Stabilized microspherical particles having hydrophobic liquid cores prepared as oil-in-water microemulsions. The particles are stabilized by a surface layer comprising an amphiphilic compound and may be functionalized to allow covalent coupling of a ligand to the surface of





the particle. When used as tracers in assays, a water insoluble dye may be incorporated in the core liquid of the microparticles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 11 OF 23 USPATFULL on STN

ACCESSION NUMBER: 97:31625 USPATFULL  
TITLE: Stabilized microspheres and methods of preparation  
INVENTOR(S): Malick, Adrien, Granite, MD, United States  
Feindt, Hans H., Parkton, MD, United States  
Hahn, Gerald D., Severn, MD, United States  
PATENT ASSIGNEE(S): Becton, Dickinson and Company, Franklin Lakes, NJ,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5620903		19970415
APPLICATION INFO.:	US 1995-374001		19950118 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-1907, filed on 4 Jan 1993, now patented, Pat. No. US 5393527, issued on 28 Feb 1995		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Scheiner, Toni R.		
ASSISTANT EXAMINER:	Huff, Sheela J.		
LEGAL REPRESENTATIVE:	Fugit, Donna R.		
NUMBER OF CLAIMS:	14		
EXEMPLARY CLAIM:	1		
LINE COUNT:	935		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Stabilized microspherical particles having hydrophobic liquid cores prepared as oil-in-water microemulsions. The particles are stabilized by a surface layer comprising an amphiphilic compound and may be functionalized to allow covalent coupling of a ligand to the surface of the particle. When used as tracers in assays, a water insoluble dye may be incorporated in the core liquid of the microparticles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 12 OF 23 USPATFULL on STN

ACCESSION NUMBER: 97:3692 USPATFULL  
TITLE: Stabilized microspheres and methods of preparation  
INVENTOR(S): Malick, Adrien, Granite, MD, United States  
Feindt, Hans H., Parkton, MD, United States  
PATENT ASSIGNEE(S): Becton, Dickinson and Company, Franklin Lakes, NJ,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5593843		19970114
APPLICATION INFO.:	US 1994-343795		19941122 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-1907, filed on 4 Jan 1993, now patented, Pat. No. US 5393527, issued on 28 Feb 1995		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Scheiner, Toni R.		
ASSISTANT EXAMINER:	Huff, Sheela J.		
LEGAL REPRESENTATIVE:	Fugit, Donna R.		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1		
LINE COUNT:	758		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Stabilized microspherical particles having hydrophobic liquid cores



prepared as oil-in-water microemulsions. The particles are stabilized by a surface layer comprising an amphiphilic compound and may be functionalized to allow covalent coupling of a ligand to the surface of the particle. When used as tracers in assays, a water insoluble dye may be incorporated in the core liquid of the microparticles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 13 OF 23 USPATFULL on STN

ACCESSION NUMBER: 96:111326 USPATFULL  
TITLE: Stabilized microspheres and methods of preparation  
INVENTOR(S): Malick, Adrien, Granite, MD, United States  
Feindt, Hans H., Parkton, MD, United States  
Hahn, Gerald D., Severn, MD, United States  
PATENT ASSIGNEE(S): Becton, Dickinson and Company, Franklin Lakes, NJ,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5580735		19961203
APPLICATION INFO.:	US 1994-343305		19941122 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-1907, filed on 4 Jan 1993, now patented, Pat. No. US 5393527		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Chan, Christina Y.		
ASSISTANT EXAMINER:	Green, Lora M.		
LEGAL REPRESENTATIVE:	Fugit, Donna R.		
NUMBER OF CLAIMS:	5		
EXEMPLARY CLAIM:	1		
LINE COUNT:	711		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Stabilized microspherical particles having hydrophobic liquid cores prepared as oil-in-water microemulsions. The particles are stabilized by a surface layer comprising an amphiphilic compound and may be functionalized to allow covalent coupling of a ligand to the surface of the particle. When used as tracers in assays, a water insoluble dye may be incorporated in the core liquid of the microparticles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 14 OF 23 USPATFULL on STN

ACCESSION NUMBER: 95:18200 USPATFULL  
TITLE: Stabilized microspheres and methods of preparation  
INVENTOR(S): Malick, Adrien, Granite, MD, United States  
Feindt, Hans H., Parkton, MD, United States  
PATENT ASSIGNEE(S): Becton, Dickinson and Company, Franklin Lakes, NJ,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5393527		19950228
APPLICATION INFO.:	US 1993-1907		19930104 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wax, Robert A.		
ASSISTANT EXAMINER:	Schmickel, David		
LEGAL REPRESENTATIVE:	Fugit, Donna R.		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
LINE COUNT:	730		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Stabilized microspherical particles having hydrophobic liquid cores prepared as oil-in-water microemulsions. The particles are stabilized by



a surface layer comprising an amphiphilic compound and may be functionalized to allow covalent coupling of a ligand to the surface of the particle. When used as tracers in assays, a water insoluble dye may be incorporated in the core liquid of the microparticles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 15 OF 23 USPATFULL on STN

ACCESSION NUMBER: 88:24376 USPATFULL  
TITLE: Reaginic test for syphilis  
INVENTOR(S): Yabusaki, Kenichi K., Albany, CA, United States  
PATENT ASSIGNEE(S): Advanced Polymer Systems, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4738932		19880419
APPLICATION INFO.:	US 1985-804059		19851203 (6)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Nucker, Christine M.		
LEGAL REPRESENTATIVE:	Ciotti & Murashige, Irell & Manella		
NUMBER OF CLAIMS:	25		
EXEMPLARY CLAIM:	1,11		
LINE COUNT:	493		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A reaginic agglutination test for syphilis-associated antibodies is disclosed. The test uses an **antigen** reagent that comprises a buffered aqueous suspension of cardiolipin **antigen** ionically coupled to latex particles via a polypeptide bridge. Positive sera react with the **antigen** reagent and yield an agglutination pattern characterized by medium to large aggregates. Negative sera yield no agglutinated particles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 16 OF 23 USPATFULL on STN

ACCESSION NUMBER: 78:16520 USPATFULL  
TITLE: **Antigen** membranes for use in syphilis diagnosis and syphilis diagnosis apparatus using such membranes  
INVENTOR(S): Suzuki, Shuichi, Tokyo, Japan  
Aizawa, Masuo, Tokyo, Japan  
Ishigur, Isao, Kasugai, Japan  
Shinohara, Rikio, Kagamihara, Japan  
Nagamura, Yoichi, Toyooka, Japan  
PATENT ASSIGNEE(S): Nippon Chemiphar Co., Ltd., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4081334		19780328
APPLICATION INFO.:	US 1977-779139		19770318 (5)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1976-29632	19760318
	JP 1976-29633	19760318
	JP 1976-29634	19760318
	JP 1976-81408	19760621

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Kaplan, G. L.  
LEGAL REPRESENTATIVE: Oblon, Fisher, Spivak, McClelland & Maier



NUMBER OF CLAIMS: 17  
EXEMPLARY CLAIM: 1,3,10  
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 4 Drawing Page(s)  
LINE COUNT: 454

AB An **antigen** membrane for syphilis diagnosis comprises cardiolipin immobilized in a polymer maxtrix. The membranes are used in syphilis diagnosis and in an apparatus for syphilis diagnosis.

L11 ANSWER 17 OF 23 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN

ACCESSION NUMBER: 2000:523021 SCISEARCH

THE GENUINE ARTICLE: 332AT

TITLE: Use of **synthetic cardiolipin** and lecithin in the **antigen** used by the Venereal Disease Research Laboratory Test for serodiagnosis of syphilis

AUTHOR: Castro A R (Reprint); Morrill W E; Shaw W A; Gale D C; Park M M; PeregrinoFerreira L A; Bazzo M L; Pope V

CORPORATE SOURCE: CTR DIS CONTROL & PREVENT, DIV AIDS STD, 1600 CLIFTON RD, MAIL STOP D-13, ATLANTA, GA 30333 (Reprint); CTR DIS CONTROL & PREVENT, TB LAB RES, ATLANTA, GA 30333; GEORGIA DEPT HUMAN RESOURCES LAB, ATLANTA, GA; AVANTI POLAR LIPIDS INC, ALABASTER, AL; UNIV FED SANTA CATARINA, FLORIANOPOLIS, SC, BRAZIL

COUNTRY OF AUTHOR: USA; BRAZIL

SOURCE: CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY, (JUL 2000)

Vol. 7, No. 4, pp. 658-661.

Publisher: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904.

ISSN: 1071-412X.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LIFE

LANGUAGE: English

REFERENCE COUNT: 13

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB The Venereal Disease Research Laboratory (VDRL) test is a microflocculation test for syphilis that uses an **antigen** containing **cardiolipin**, lecithin, and cholesterol. For more than 50 years, the preparation of natural **cardiolipin** and lecithin for this test has been based on the Pangborn method which involves isolating and purifying these components from beef hearts. This process is tedious and time-consuming and results in a variable purity range. In our studies, we found that a **VDRL antigen** using **synthetic** tetramyristoyl **cardiolipin** and **synthetic** 1-palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine (lecithin) was as specific in detecting syphilis as a **VDRL antigen** made with natural components. In 85% of the cases, we obtained an endpoint titer of 1/2 or 1 dilution more than a titer obtained with a **VDRL antigen** made with natural components. The use of these pure **synthetic** compounds, with a purity of 99%, would offer advantages in the standardization and stability of the **VDRL antigen**. Because this **antigen** is the basic ingredient in the preparation of nontreponemal reagents such as the rapid plasma reagin, toluidine red unheated serum test, and the unheated serum reagin, the use of this **synthetic VDRL antigen** should also increase the reactivity of these reagents.

L11 ANSWER 18 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:537109 HCAPLUS

DOCUMENT NUMBER: 134:128134

TITLE: Use of **synthetic cardiolipin** and lecithin in the **antigen** used by the venereal disease research laboratory test for serodiagnosis of syphilis





AUTHOR(S): Castro, Arnold R.; Morrill, William E.; Shaw, Walter A.; Gale, David C.; Park, Mahin M.; Peregrino-Ferreira, Luiz A.; Bazzo, Maria L.; Pope, Victoria

CORPORATE SOURCE: Division of AIDS, STD, and TB Laboratory Research, Centers for Disease Control and Prevention, Atlanta, GA, 30333, USA

SOURCE: Clinical and Diagnostic Laboratory Immunology (2000), 7(4), 658-661  
CODEN: CDIMEN; ISSN: 1071-412X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Venereal Disease Research Laboratory (VDRL) test is a microflocculation test for syphilis that uses an **antigen** containing **cardiolipin**, lecithin, and cholesterol. For more than 50 yr, the preparation of natural **cardiolipin** and lecithin for this test has been based on the Pangborn method which involves isolating and purifying these components from beef hearts. This process is tedious and time-consuming and results in a variable purity range. In our studies, we found that a **VDRL antigen** using **synthetic tetramyristoyl cardiolipin** and **synthetic 1-palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine** (lecithin) was as specific in detecting syphilis as a **VDRL antigen** made with natural components. In 85% of the cases, we obtained an endpoint titer of 1/2 or 1 dilution more than a titer obtained with a **VDRL antigen** made with natural components. The use of these pure **synthetic** compds., with a purity of 99%, would offer advantages in the standardization and stability of the **VDRL antigen**. Because this **antigen** is the basic ingredient in the preparation of non-treponemal reagents such as the rapid plasma reagin, toluidine red unheated serum test, and the unheated serum reagin, the use of this **synthetic VDRL antigen** should also increase the reactivity of these reagents.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1966:450770 HCAPLUS

DOCUMENT NUMBER: 65:50770

ORIGINAL REFERENCE NO.: 65:9522b-e

TITLE: Chemical structure and serological activity of natural and **synthetic cardiolipin** and related compounds

AUTHOR(S): de Bruijn, J. H.

CORPORATE SOURCE: Natl. Inst. Public Health, Utrecht, Neth.

SOURCE: Brit. J. Venereal Diseases (1966), 42(2), 125-8

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A review of the literature is presented on the chemical structure of **cardiolipin** and the serological activity of similar **synthetic** compds. For the 1st time a **synthetic** product, diphosphatidylglycerol (which contains equimolar amts. of stearic and oleic acids) (I), is reported to be qualified as a substitute for natural **cardiolipin** in syphilis serology. Solns. of I, natural lecithin (II), and cholesterol (III) in dehydrated EtOH were mixed and constituted to give **antigens** with the following compns.: 0.0175% I, 0.0875% II, and 0.3% III for the Kolmer test; and 0.03% I, 0.21% II, and 0.9% III for the **VDRL** microflocculation test. These **antigens** were tested in parallel with similar mixts. prepared with the same II and III, but containing natural **cardiolipin** instead of I. The Kolmer complement-fixation test (Am. J. Clin. Path. 12, 109(1942)) was carried out in its 1/5-volume modification employing 2 "exact units" of complement. In titrns. with human syphilitic serum, both **antigens** showed an

almost identical pattern with the usual prezone phenomenon. In the qual. VDRL microflocculation test, results obtained with the antigen containing I compared favorably with those of standard antigen. The former gave even more clear-cut pos. reactions without altering the specificity of the test. The results obtained indicate that the degree of unsatn. of the fatty acid chains apparently is not of primary importance for serological activity. Even if reasons of economy were to prevent the general application of I (preferably in combination with synthetic II) in the sero-diagnosis of syphilis, it would be worthwhile to consider its use as an international standard. 40 references.

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FILE 'BIOSIS, MEDLINE, EMBASE, JAPIO, USPATFULL, AGRICOLA, SCISEARCH,  
 WPIDS, HCAPLUS' ENTERED AT 19:04:08 ON 21 JUN 2004

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L1      26 S TETRAMYRISTOYL CARDIOLIPIN
L2      0 S L1 AND HOSPHOCHOLINE
L3      5 S L1 AND PHOSPHOCHOLINE
L4      1 DUP REM L3 (4 DUPLICATES REMOVED)
        E POPE
L5      32 S E3 AND VICTORIA
L6      1 S L5 AND PHOSPHOCHOLINE
L7      1 S L5 AND CARDIOLIPIN
L8      1 S L6 AND L7
L9      2363 S VDRL
L10     522 S L9 AND ANTIGEN
L11     23 S L10 AND CARDIOLIPIN (L) SYNTHETIC
L12     19 DUP REM L11 (4 DUPLICATES REMOVED)

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FILE 'STNGUIDE' ENTERED AT 19:11:43 ON 21 JUN 2004

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